

Listing of Claims:

1. (Currently Amended) A tip optical element unit for
an immersion microscope objectives objective for observing a
sample, said tip optical element unit comprising:

a first optical element; ~~and~~

5 a second optical element ~~[[,]] cemented to each other,~~
wherein the first optical element; and

an annular light-blocking area ~~is~~ provided ~~on~~ at an
interface between the first optical element and the second
optical element;

10 wherein, among optical elements within the objective, the
first and second optical elements are closest to the sample; and

wherein a gap between the sample and the first optical
element is filled with liquid having a refractive index larger
than air.

2. (Currently Amended) A tip optical element unit for
an immersion microscope objectives objective for observing a
sample, said tip optical element unit comprising:

a first optical element; ~~and~~

5 a second optical element; and ~~, wherein~~

a light-blocking area which is formed on a surface of one of the first optical element and the second optical element, and which is shaped so as to avoid blocking an effective beam; ~~and~~

wherein the first optical element and the second optical element are cemented to each other, ~~with~~ and the surface on which the light-blocking area is formed ~~[[,]]~~ is sandwiched between the first optical element and the second optical element;

wherein, among optical elements within the objective, the first and second optical elements are closest to the sample; and

wherein a gap between the sample and the first optical element is filled with liquid having a refractive index larger than air.

3. (Currently Amended) A tip optical element unit for an immersion microscope objectives objective for observing a sample, said tip optical element unit comprising:

a first optical element; ~~[[,]]~~

a second optical element; ~~and~~

a third optical element; and ~~wherein~~

a light-blocking area which is formed on a surface of one of the first optical element and the second optical element, and which is shaped so as to avoid blocking an effective beam;

wherein the first optical element and the second optical element are cemented to each other, ~~with a~~ and the surface on

which the light-blocking area is formed [[,]] is sandwiched between the first optical element and the second optical element; and

15 wherein the third optical element is embedded at a center of the first optical element and the second optical element; and
 wherein, among optical elements within the objective, the first, second and third optical elements are closest to the sample.

4. (Currently Amended) A The tip optical element ~~for immersion microscope objectives unit~~ according to claim 1, wherein a concave portion is formed at a center of the first optical element and the ~~sec~~ and second optical element.

5. (Currently Amended) A The tip optical element ~~for immersion microscope objectives unit~~ according to claim 1, wherein the light-blocking area is formed of one of an evaporated metal film, a painted material, and a metal leaf.

6. (Currently Amended) A The tip optical element ~~for immersion microscope objectives unit~~ according to claim 3, wherein the third optical element is ~~a minute lens which~~ smaller in size than both the first optical element and the second
5 optical element and is different in dispersion and refractive

index from the first optical element and the second optical element.

7. (Currently Amended) A method of making a tip optical element unit for an immersion microscope objectives objective for observing a sample, said method comprising ~~the steps of:~~

5 placing a beam restricting means element on a surface of one of a first optical element and a second optical element and defining ~~providing~~ a light-transmitting area ~~transmitting which transmits~~ an effective beam and a ~~lightblocking~~ light-blocking area formed around the light-transmitting area ~~to~~ with the beam restricting ~~means element~~; and

10 cementing the first optical element and the second optical element to each other ~~, with~~ such that the beam restricting ~~means element is~~ sandwiched between the first optical element and the ~~to~~ second optical element;

15 wherein, among optical elements within the objective, the first and second optical elements are closest to the sample; and

wherein a gap between the sample and the first optical element is filled with liquid having a refractive index larger than air.

8. (Currently Amended) A method of making a tip optical element unit for an immersion microscope ~~objectives~~ objective for observing a sample, said method comprising ~~the steps of:~~

forming a light-blocking area on a surface of one of a first
5 optical element and a second optical element, said light-blocking area being shaped so as to avoid blocking an effective beam;

cementing the first optical element and the second optical element to each other, ~~with~~ such that the light-blocking area is sandwiched between the first optical element and the second
10 optical element;

forming a concave portion at a center of the first optical element and the second optical element; and

embedding a third optical element in the concave portion;

wherein, among optical elements within the objective, the
15 first, second and third optical elements are closest to the sample.

9. (Currently Amended) A The tip optical element ~~for immersion microscope objectives~~ unit according to claim 2, wherein the light-blocking area is formed of one of an evaporated metal film, a painted material, and a metal leaf.

10. (Currently Amended) A The tip optical element ~~for immersion microscope objectives~~ unit according to claim 3,

wherein the light-blocking area is formed of one of an evaporated metal film, a painted material, and a metal leaf.

11. (Currently Amended) A The tip optical element ~~for~~
~~immersion microscope objectives~~ unit according to claim 4,
wherein the light-blocking area is formed of one of an evaporated metal film, a painted material, and a metal leaf.